



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,824	02/26/2002	Jay S. Dweck	G08.012	5662

28062 7590 05/23/2005

BUCKLEY, MASCHOFF, TALWALKAR LLC
5 ELM STREET
NEW CANAAN, CT 06840

EXAMINER

SANTOS, PATRICK J D

ART UNIT	PAPER NUMBER
----------	--------------

2161

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,824

Applicant(s)

DWECK ET AL.

Examiner

Patrick J Santos

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-5, 8-23, 25, 26, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,336,094 issued to Ferguson et al. (hereafter Ferguson '094) in view of the publication, "Design and Implementation of an Access Control Processor for XML Documents," by Damiani et al., published by Computer Networks, June 2000 (hereafter Damiani '00), in further view of U.S. Patent No. 6,735,585 issued to Black et al. (hereafter Black '585).

Claim 1:

Regarding Claim 1, Ferguson '094 discloses: A method of facilitating access to documents (Ferguson '094: Abstract), comprising:

- receiving information associated with a financial document (Ferguson '094: col. 4, lns. 24-28 – note the reception of information contained in an ASCII file);
- determining a document tag associated with the financial document based on the received information (Ferguson '094: col. 4, lns. 28-48 – note the scanning for table headings);
and
- automatically analyzing content of the financial document (Ferguson '094: col. 4, lns. 28-48).

However, Ferguson '094 does not explicitly disclose:

- that the automatic analysis is to determine an appropriate entitlement rule;
- determining a content selection tag associated with a content reader; and
- arranging for the content reader to receive information associated with the financial document based on the automatically determined entitlement rule and a bit vector representing at least one of: (i) the document tag and a plurality of tag sets, or (ii) a content selection tag and a plurality of document tags.

Damiani '00 discloses:

- that the automatic analysis is to determine an appropriate entitlement rule (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document); and
- determining a content selection tag associated with a content reader (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document).
- arranging for the content reader to receive information associated with the financial document based on the automatically determined entitlement rule (Damiani '00: p. 11, Section 5.2, item labeled "Tree Labeling." - Note that in this context, the access control rules in Damiani's XAS sheet read on entitlement rules. Further note that the sending final resulting pruned XML document (Damiani '00: p. 11, Section 5.2, last two lines, lns. 38-39) reads on arranging for a content reader to receive information based on the transformation).

However, Damiani '00 does not explicitly disclose:

- based on the automatically determined entitlement rule and a bit vector representing at least one of: (i) the document tag and a plurality of tag sets, or (ii) a content selection tag and a plurality of document tags.

Black '585 disclose the use of bit vectors in combination of tag sets and attributes (col. 6, lns. 53-58).

It would have been obvious to a person having ordinary skill in the art to apply the access control of Damiani '00 to the financial documents of Ferguson '094. The motivation to combine is suggested by Damiani '00 which discloses that application of the XAS infrastructure of Damiani '00 provides a particularly "simple and effective way" (Damiani '00: Abstract) to provide access control to documents, such as that of the potentially sensitive financial documents of Ferguson '094. Examiner notes that Damiani '00 by itself discloses an XML parser, but in combination with Ferguson '094 includes a direct financial content parser. Thus determinations are made directly from the financial content.

It would have been further obvious to a person having ordinary skill in the art to apply the bit vector of Black '585 to the Ferguson '094 and Damiani '00 combination. The motivation to combine is suggested by Black '585 which discloses: an enhanced search mechanism to quickly extract financial data, such as the financial document of the Ferguson '094 and Damiani '00 combination (Black '585: col. 2, lns. 7-28).

Claims 2-4, 8, 13-21, and 25:

Regarding Claims 2-4, 8, 13-21, and 25, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 1 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 2) wherein the entitlement rule includes: an entitlement subject associated with a group of content readers (Damiani '00: p. 8, Section 3.2 titled, "Identifying Authorization Subjects" – Note that authorization subjects reads on content readers, and furthermore groupings, e.g. wild cards, and public, read on a group of content readers.)
- (Claim 3) wherein the entitlement rule includes an entitlement resource associated with at least one financial document (Damiani '00, pp. 8-9, Section 4 titled, "Authorization Enforcement" – Note that the authorization rules of Damiani '00 address document level and sub-document level access control, which reads on an entitlement resource associated with a document.)
- (Claim 4) wherein the entitlement rule includes an entitlement subject associated with a group of content readers (Damiani '00: p. 8, Section 3.2 titled, "Identifying Authorization Subjects"; an entitlement resource associated with at least one financial document (Damiani '00, pp. 8-9, Section 4 titled, "Authorization Enforcement"); and an entitlement action associated with the entitlement subject and the entitlement resource (Damiani '00: p. 10, Ins. 7-11; p. 11, Section 5.2 titled, "Execution Phases").
- (Claim 8) wherein the entitlement rule is associated with at least one entitlement tag (Damiani '00: p. 16, note the examples of the entitlement policies set at both the organization and department levels; further note that entitlement rules are associated with at least one tag).
- (Claim 13) wherein said arranging comprises transmitting an indication of the financial document to the content reader (Damiani '00: p. 17, Section 7, note item titled, "Document View").

- (Claim 14) wherein said arranging comprises transmitting the financial document to the content reader (Damiani '00: p. 17, Section 7, note item titled, "Document View").
- (Claim 15) wherein the document tag is determined by retrieving information from a database (Damiani '00, p. 2, lns. 24-42; p. 3, Fig. 1 – note the DTD data stores read on a database).
- (Claim 16) wherein the document tag is determined by receiving information from a content publisher, via a graphical user interface (Damiani '00: p. 17, Fig. 8; p. 17, Section 7, note item titled, "Document View" – note Fig. 8 is illustrating a GUI based web browser that is rendering the XML tags.)
- (Claim 17). The method of claim 1, wherein the document tag comprises at least one of (i) a primary tag, and (ii) a secondary tag (Damiani '00: p. 15, Fig. 7 – note the example XML document which illustrates document tags comprising at least one of a primary tag and a secondary tag).
- (Claim 18) wherein the content selection tag is determined by retrieving information from a database (Damiani '00, p. 2, lns. 24-42; p. 3, Fig. 1 – note the DTD data stores read on a database).
- (Claim 19) wherein content selection tag is determined by receiving information from the content reader via a graphical user interface (Damiani '00: p. 17, Fig. 8; p. 17, Section 7, note item titled, "Document View" – note Fig. 8 is illustrating a GUI based web browser that is rendering the XML tags.)

- (Claim 20) wherein said arranging is further based on a content reader tag (Damiani '00: p. 16, note example Department Policy, item 10 refers to "Bob" thus demonstrating a specific content reader tag).
- (Claim 21) wherein the financial document comprises content to be provided to a content reader device via a communication network (Damiani '00: Abstract – note the platform of the XAS processing includes communication networks.)
- (Claim 25) further comprising transmitting the financial document to the content reader (Damiani '00: p. 17, Fig. 8; p. 17, Section 7, note item titled, "Document View").

Claim 5:

Regarding Claim 5, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 4 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose: wherein the entitlement action enables a content reader to perform at least one of the following actions:

- (i) receive an indication of a document,
- (ii) receive a document,
- (iii) modify a document, and
- (iv) delete a document (Damiani '00: p. 8, lns. 33-35).

Claims 9 and 12:

Regarding Claims 9 and 12, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 8 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 9) wherein the entitlement tag is associated with at least one entitlement tag domain (Damiani '00: p. 16, note example policies, both of which illustrate setting entitlements specific to a DTD; furthermore, DTDs read on entitlement tag domains).
- (Claim 12) wherein the entitlement tag is associated with at least one of (i) a content reader category, (ii) a content reader region; or (iii) a financial document category (Damiani '00: p. 16, note both example policies refer to groups which reads on content reader categories).

Claims 10-11:

Regarding Claims 10-11, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 9 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 10) wherein the entitlement tag domain comprises a single-rooted, hierarchical data structure (Damiani '00: p. 15, note example XML document based on a DTD; p. 16, note example policies, both of which illustrate setting entitlements specific to a DTD; furthermore, note that DTDs are single-rooted, hierarchical data structures).
- (Claim 11) wherein the entitlement tag domain comprises a multilevel domain, and at least one domain level comprises a plurality of entitlement tags (Damiani '00: p. 15, note example XML document based on a DTD; p. 16, note example policies – note the application of a plurality of entitlement tags applies to the multilevel XML document).

Claims 22-23:

Regarding Claims 22-23, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 21 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose:

- (Claim 22) wherein the communication network comprises at least one of:
 - (i) the Internet,
 - (ii) an intranet,
 - (iii) a public network,
 - (iv) a public switched telephone network,
 - (v) a proprietary network,
 - (vi) a wireless network, or
 - (vii) a local area network (Damiani '00: Abstract – note the platform of the XAS processing includes the Internet and intranets).
- (Claim 23) wherein the document comprises at least one of
 - (i) text content,
 - (ii) image content,
 - (iii) audio content, or
 - (iv) executable content (Damiani '00: p. 15, Fig. 7 – note the example document has text content).

Claim 26:

Regarding Claim 26, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 25 (supra). Additionally, Ferguson '094, Damiani '00, and Black '585 in combination disclose: wherein said transmitting is performed via at least one of

- (i) a content controller,
- (ii) a content publisher,
- (iii) a content reader,
- (iv) a personal computer,
- (v) a server,
- (vi) a portable computing device,
- (vii) a wireless telephone,
- (viii) a Web site, and
- (ix) an electronic mail message (Damiani '00: p. 3, Fig. 1 – note Damiani '00 is supported on web sites).

Claim 28:

Regarding Claim 28, Ferguson '094 discloses: an apparatus (Ferguson '094: Abstract), comprising:

- a processor (Ferguson '094: Title, Abstract – note that Ferguson '094 is directed towards “electronically recognizing and parsing” which requires a processor);
- and a storage device in communication with said processor and storing instructions adapted to be executed by said processor (Ferguson '094: Title, Abstract – note that Ferguson '094 is directed towards “electronically recognizing and parsing” which requires a storage device storing instructions and sending to a processor) to:
 - o receive information associated with a financial document (Ferguson '094: col. 4, lns. 24-28 – note the reception of information contained in an ASCII file);

- determine a document tag associated with the financial document based on the received information (Ferguson '094: col. 4, lns. 28-48 – note the scanning for table headings);
- automatically analyze financial content of the financial document (Ferguson '094: col. 4, lns. 28-48);

However, Ferguson '094 does not explicitly disclose:

- the automatic analysis is to determine an appropriate entitlement rule;
- determine a content selection tag associated with a content reader;
- arrange for the content reader to receive information associated with the document based on the automatically determined entitlement rule and a bit vector representing at least one of: (i) the document tag and a plurality of content selection tag sets, or (ii) a content selection tag set and a plurality of document tags.

Damiano '00 discloses:

- the automatic analysis is to determine an appropriate entitlement rule (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document);
- determine a content selection tag associated with a content reader (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document);
- arrange for the content reader to receive information associated with the document based on the automatically determined entitlement rule (Damiani '00:

p. 11, Section 5.2, item labeled “Tree Labeling.” – Note that in this context, the access control rules in Damiani’s XAS sheet read on entitlement rules. Further note that the sending final resulting pruned XML document (Damiani ’00: p. 11, Section 5.2, last two lines, lns. 38-39) reads on arranging for a content reader to receive information based on the transformation).

However, Damiano ’00 does not explicitly disclose: a bit vector representing at least one of: (i) the document tag and a plurality of content selection tag sets, or (ii) a content selection tag set and a plurality of document tags.

Black ’585 disclose the use of bit vectors in combination of tag sets and attributes (col. 6, lns. 53-58).

It would have been obvious to a person having ordinary skill in the art to apply the access control of Damiani ’00 to the financial documents of Ferguson ’094. The motivation to combine is on the same basis as Claim 1 (supra).

It would have been further obvious to a person having ordinary skill in the art to apply the bit vector of Black ’585 to the Ferguson ’094 and Damiani ’00 combination. The motivation to combine is on the same basis as Claim 1 (supra).

Claims 29-30:

Regarding Claims 29-30, Ferguson ’094, Damiani ’00, and Black ’585 disclose all the limitations of Claim 28 (supra). Additionally, Ferguson ’094, Damiani ’00, and Black ’585 disclose:

- (Claim 29) wherein said storage device further stores at least one of:
 - (i) a document database,

- (ii) a content reader database,
 - (iii) an entitlement rule database, or
 - (iv) an output database (Damiani '00, p. 2, Ins. 24-42; p. 3, Fig. 1 – note the DTD data stores read on a database).
- (Claim 30) further comprising: a communication device coupled to said processor and adapted to communicate with at least one of:
- (i) a content publishing device,
 - (ii) a document storage device,
 - (iii) a content controller,
 - (iv) a content reader device, or
 - (v) a payment device (Damiani '00: p. 17, Fig. 8; p. 17, Section 7, note item titled, “Document View” – note Fig. 8 is illustrating a GUI based web browser that is rendering the XML tags; a web browser reads on a content reader device).

Claim 31:

Regarding Claim 31, Ferguson '094 discloses: medium storing instructions adapted to be executed by a processor (Ferguson '094: Title, Abstract – note that Ferguson '094 is directed towards “electronically recognizing and parsing” which requires a storage device storing instructions and sending to a processor), said method comprising:

- receiving information associated with a financial document (Ferguson '094: col. 4, Ins. 24-28 – note the reception of information contained in an ASCII file);
- determining a document tag associated with the financial document based on received information (Ferguson '094: col. 4, Ins. 28-48 – note the scanning for table headings);

- automatically analyzing financial content of the financial document (Ferguson '094: col. 4, lns. 28-48);

However, Ferguson '094 does not explicitly disclose:

- the automatic analysis is to determine an appropriate entitlement rule;
- determining a content selection tag associated with a content reader;
- arranging for the content reader to receive information associated with the document based on the automatically determined entitlement rule and a bit vector representing at least one of: (i) the document tag and a plurality of content selection tag sets, or (ii) a content selection tag set and a plurality of document tags.

Damiani '00 discloses:

- the automatic analysis is to determine an appropriate entitlement rule (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document);
- determining a content selection tag associated with a content reader (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document); and
- arranging for the content reader to receive information associated with the document based on the automatically determined entitlement rule (Damiani '00: p. 11, Section 5.2, item labeled "Tree Labeling." - Note that in this context, the access control rules in Damiani's XAS sheet read on entitlement rules. Further note that the sending final resulting pruned XML document (Damiani '00: p. 11, Section 5.2, last two lines, lns. 38-

39) reads on arranging for a content reader to receive information based on the transformation).

However, Damiani '00 does not explicitly disclose:

- a bit vector representing at least one of: (i) the document tag and a plurality of content selection tag sets, or (ii) a content selection tag set and a plurality of document tags.

Black '585 disclose the use of bit vectors in combination of tag sets and attributes (col. 6, lns. 53-58).

It would have been obvious to a person having ordinary skill in the art to apply the access control of Damiani '00 to the financial documents of Ferguson '094. The motivation to combine is on the same basis as Claim 1 (supra).

It would have been further obvious to a person having ordinary skill in the art to apply the bit vector of Black '585 to the Ferguson '094 and Damiani '00 combination. The motivation to combine is on the same basis as Claim 1 (supra).

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson '094, Damiani '00, and Black '585 in combination in view of the publication, "RIXML Specification User's Guide and Data Dictionary Report," published by RIXML, June 20, 2001 (hereafter RIXML '01).

Claim 24:

Regarding Claim 24, Ferguson '094, Damiani '00, and Black '585 in combination disclose all the limitations of Claim 21 (supra) However, Ferguson '094, Damiani '00, and

Black '585 in combination disclose does not explicitly disclose, wherein the content comprises at least one of

- (i) financial information,
- (ii) financial news,
- (iii) information about financial events,
- (iv) investment information, or
- (v) market information.

RIXML '01 discloses one of many financial information XML schemas used to provide structured data regarding investment research. Specifically, RIXML '01 discloses: wherein the content comprises at least one of

- (i) financial information,
- (ii) financial news,
- (iii) information about financial events,
- (iv) investment information, or
- (v) market information (RIXML '01: p. 5, Section titled, "Overview"; p. 6, Item titled, "RIXML Schema" – note that among other things, RIXML supports investment information.)

It would have been obvious to a person having ordinary skill in the art to apply the financial data of RIXML '01 to the XAS infrastructure of Ferguson '094, Damiani '00, and Black '585 in combination. The motivation to combine is suggested by Damiani '00 which discloses that application of the XAS infrastructure of Damiani '00 provides a particularly

“simple and effective way” (Damiani ’00: Abstract) to provide access control to XML documents, such as that of RIXML ’01.

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferguson ’094 in view of Damiani ’00, and in further view of “The Algorithm Design Manual”, by Steven Skiena, published by Telos Press (TM) in 1998 (hereafter Skiena ’98)

Claim 27:

Regarding Claim 27, Ferguson ’094 discloses: a computer-implemented method of facilitating access to investment research documents (Ferguson ’094: Abstract), comprising:

- receiving an investment research document (Ferguson ’094: col. 4, lns. 24-28 – note the reception of information contained in an ASCII file);
- determining a document tag associated with the investment research document (Ferguson ’094: col. 4, lns. 28-48 – note the scanning for table headings); and
- automatically determining, based on investment research content of the investment research document, tags associated with at least one of the investment research document

However, Ferguson ’094 does not explicitly disclose:

- determining a content selection tag associated with a content reader;
- that the automatically determined tags are an entitlement tag associated with at least one of the investment research document, the document tag, the content reader, and a content reader tag; and
- transmitting the investment research document to the content reader via a communication network in accordance with the entitlement tag and a hash table representing at least one

of: (i) the document tag and a plurality of content selection tag sets, or (ii) a content selection tag set and a plurality of document tags.

Damiani '00 discloses:

- determining a content selection tag associated with a content reader (Damiani '00: p. 11, Section 5.2, item labeled, "Tree Labeling." - Note that in this context, tree labeling reads on content selection of an XML document);
- that the automatically determined tags are an entitlement tag associated with at least one of the investment research document, the document tag, the content reader, and a content reader tag (Damiani '00: p. 11, Section 5.2, item labeled "Tree Labeling." – Note that in this context, the access control rules in Damiani's XAS sheet read on entitlement rules.

Further note that the sending final resulting pruned XML document (Damiani '00: p. 11, Section 5.2, last two lines, lns. 38-39) reads on arranging for a content reader to receive information based on the transformation); and

- transmitting the investment research document to the content reader via a communication network in accordance with the entitlement tag (Damiani '00: p. 17, Section 7, note item titled, "Document View").

However, Damiani '00 does not explicitly disclose use of a hash table such where

- the hash table represents at least one of: (i) the document tag and a plurality of content selection tag sets, or (ii) a content selection tag set and a plurality of document tags.

Skiena '98 discloses hash tables (Skiena '98: pp. 176-177).

It would have been obvious to a person having ordinary skill in the art to apply the access control of Damiani '00 to the financial documents of Ferguson '094. The motivation to combine is on the same basis as Claim 1 (*supra*).

It would have been further obvious to a person having ordinary skill in the art to apply a hash table to the Ferguson '094 and Damiani '00 combination. The motivation to combine is suggested by Skiena '98 which discloses: "for applications involving a moderate-to-large number of keys, a hash table with bucketing is probably the right way to go." (Skiena '98: p. 176, Ins. 37-39). Examiner notes that large financial documents that contain 2-3 years worth of data (Ferguson '094: col. 4, Ins. 49-50), a person having ordinary skill would be motivated to apply a hash as per the disclosure of Skiena '98.

Response to Arguments

6. Applicant's arguments filed February 23, 2005 have been fully considered but they are not persuasive. Applicant's arguments are addressed as follows:

A. Office Action With Modifications Necessitated by
Amendment Addresses Direct Analysis of Financial Content.

Examiner acknowledges amended claims emphasizing the distinction between analyzing tags and direct analysis of content. Examiner has added the Ferguson '094 reference which directly analyzes financial reports and addresses these newly added limitations.

B. Office Action With Modifications Necessitated by
Amendment Addresses Bit Vector and Hash Optimizations.

Examiner acknowledges amended claims adding bit vector and hash optimizations.

Examiner has added the Black '585 and the Skiena '98 references respectively to address these newly added limitations.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J.D. Santos whose telephone number is 571-272-4028. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick J.D. Santos
May 16, 2005



SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100